

What is Claimed is:

1. An intelligent power socket, comprising:

a base, having a casing for covering the top of said base, and said casing at least having a first socket and a second socket, and said first and second sockets being respectively connected to a power supply;

a printed circuit board, being installed at the inner bottom of said base, and further comprising a rectification circuit, and said rectification circuit adjusting an alternate current to a direct current with constant voltage;

a sampling amplify circuit, being coupled to said first socket and said rectification circuit, and converting the alternate current entering said first socket into a direct current;

a compare amplify circuit, being coupled to said sampling amplify circuit and second socket, and comparing the voltage of the current outputted from said sampling amplify circuit with the voltage outputted from said rectification circuit, and outputting a potential signal according to the comparison result;

a control circuit, being coupled to said compare amplify circuit and second socket, and controlling the ON and OFF states of the power of said second socket with respect to the signal inputted from said compare amplify circuit;

by means of foregoing elements, said compare amplify circuit comparing the voltage outputted from said first socket with a standard

voltage, and sending a signal to said control circuit, thereby said control circuit turning the power of said second socket on and off with
respective to the on and off states of said first socket according to said
potential signal, and thus not just saving power, but also disconnecting
the power of all sockets without switching off the power of each socket
manually.

2. The intelligent power socket of claim 1, wherein said rectification
circuit comprises a capacitor and a resistor connected in parallel for
lowering the voltage of an alternate current, and said capacitor and
resistor being coupled to a bridge rectifier, a Zener diode, and a
capacitor by an electric circuit, thereby the alternate current after its
voltage being reduced by said capacitor and resistor is converted into a
pulse direct current of constant voltage by said bridge rectifier, Zener
diode, and capacitor, and said pulse direct current is modified into a
constant smooth direct current.

3. The intelligent power socket of claim 1, wherein said sampling amplify
circuit comprises a transformer coupled to said first socket and
rectification circuit, and also to a feedback amplify circuit, and the
output end of said feedback amplify circuit is connected to a diode, a
capacitor, and a resistor in series, such that when the power of said first
socket is connected, the sampling amplify circuit amplifies the power
and converts the alternate current into a direct current.

4. The intelligent power socket of claim 1, wherein said compare amplify
circuit comprises a comparator, and the input end of said comparator is

connected to said rectification circuit through said capacitor, resistor, and Zener diode, and another end of said comparator is connected to said sampling amplify circuit, and the output end is connected to a resistor in series, so that said comparator compares the voltage inputted from said sampling amplify circuit with the standard voltage outputted from said rectification circuit.

5 5. The intelligent power socket of claim 1, wherein said control circuit comprises a relay, and said relay is connected with said second socket in series.

10 6. The intelligent power socket of claim 1, wherein said control circuit comprises a light emitting diode for indicating the status of the power supply.